

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 (Currently amended) A prosthetic graft impregnated or coated with a bioresorbable sealant composition ~~for coating a prosthetic graft~~, said composition comprising a polymer formed by cross-linking dextran molecules by formaldehyde and urea condensation.
- 2 (Currently amended) The prosthetic graft sealant as claimed in Claim 1, wherein said dextran molecules include naturally occurring dextran, hydrophilic hydroxyl group-containing derivatives of dextran or modified forms of dextran containing other reactive groups.
- 3 (Currently amended) The prosthetic graft sealant as claimed in Claim 1, wherein said ~~naturally occurring~~ dextran molecules are ~~is~~ provided by fermentation using *Leuconostoc mesenteroides* bacteria.
- 4 (Currently amended) The prosthetic graft sealant as claimed in Claim 1 wherein the dextran molecules have a molecular weight of 30,000 to 60,000.
- 5 (Currently amended) A method of producing a substantially non-porous graft by exposing at least one surface of a flexible material to a mixture of dextran, urea and formaldehyde, and incubating at temperatures of from 20°C to 250°C for a time sufficient for cross-linking of said dextran on said surface to take place

thus forming a polymer comprising bonds sufficiently labile to permit resorption at an appropriate rate for tissue ingrowth upon implantation of the substantially non-porous graft into a human or animal body.

- 6 (Original) The method as claimed in Claim 5 wherein the temperature is from 30°C to 200°C.
- 7 (Previously presented) The method as claimed in Claim 6 wherein said flexible material is a polyester knitted or woven fabric, or a PTFE-based material.
- 8 (Original) The method as claimed in Claim 7 wherein said fabric material is expanded PTFE.
- 9 (Currently amended) The method as claimed in Claim 5 further including the step of ~~practising~~ plasticising said cross-linked dextran by exposure of said coated surface to glycerol and, optionally, thereafter removing excess glycerol by alcohol rinsing.
- 10 (Cancelled)
- 11 (Currently amended) A method of forming a prosthetic graft impregnated or coated with a bioresorbable sealant composition comprising polymerised dextran ~~for use as a biodegradable coating for a prosthetic graft,~~ said method comprising:
- a) exposing a water-based solution of dextran to 2 to 25 (weight %) of urea and allowing the urea to enter into solution to form a mixture;
 - b) exposing the mixture of step a) to formaldehyde;

- c) impregnating or coating a flexible graft material with the mixture of step b);
- e)d) forming polymerised dextran on said graft material by heating the ~~mixture of step b)~~ impregnated or coated flexible graft material of step c) at temperatures between 20 to 250°C for a time sufficient to allow polymerisation to occur.
- 12 (Original) The method as claimed in Claim 11 wherein 50 to 100% (by weight) of formaldehyde, by reference to the weight of urea, is added.
- 13 (Currently amended) The method as claimed in Claim 12 wherein 70 to 80% (~~be~~ by weight) of formaldehyde, by reference to the weight of urea, is added.
- 14 (Previously presented) The method as claimed in Claim 11 wherein the temperature is from 30°C to 200°C.
- 15 (Previously presented) The method as claimed in Claim 11 wherein said dextran has a molecular weight of 30,000 to 60,000.